RĪGAS TEHNISKĀ UNIVERSITĀTE

Reģ.Nr.90000068977, Ķīpsalas iela 6A, Rīga, LV-1048, Latvija
Tālr.:67089999; Fakss:67089710, e-pasts:rtu@rtu.lv, www.rtu.lvwww.rtu.lv

Study programme "Business Informatics"

Main attributes

Title	Business Informatics
Identification code	DMB0
Education classification code	45483
Level and type	Academic Master (Second Cycle) Studies
Higher education study field	Information Technology, Computer Engineering, Electronics, Telecommunications, Computer Control and Computer Science
Head of the study field	Agris Ņikitenko
Deputy head of the study field	Jurģis Poriņš
Department responsible	Faculty of Computer Science, Information Technology and Energy
Head of the study programme	Mārīte Kirikova
Professional classification code	-
The type of study programme	Full time, Part time
Language	English
Accreditation	29.11.2023 - 30.11.2029; Accreditation certificate No 2023/44-A
Volume (credit points)	120.0
Duration of studies (years)	Full time studies - 2,0; Part time studies - 2,5
Degree or/and qualification to be obtained	Master degree of engineering science in business informatics
Qualification level to be obtained	The 7th level of European Qualifications Framework (EQF) and Latvian Qualifications Framework (LQF)
Programme prerequisites	First cycle higher education in the field of computer science and information technology, or comparable education; or first cycle higher education in another field and an entrance exam or at least two years of professional experience in a field related to computer science and information technology. English language skills equivalent to at least CEFR B2 level.

Description

Abstract	The study programme is an interdisciplinary programme that has been implemented since 2010/2011. study year. The study programme was developed in cooperation with the University of Buffalo (USA) and International Business Machines Corporation (IBM). The study language is English. In the study programme "Business Informatics" (total 120 ECTS), 57 ECTS are allocated for compulsory study courses, 27 ECTS to compulsory limited choice study courses, 6 ECTS to free choice, and 30 ECTS to the Master Thesis. There are three types of study courses: ICT study courses (for example, Advanced Data Technologies), business study courses (for example, Business Ethics) and integrated study courses (for example, Business Process Management and Engineering). Each study course has clearly defined learning outcomes and evaluation mechanisms. Various business and ICT issues are integrated in the study programme at the level of the study programme and at the level of individual study courses. Local and international students study together in the study programme. The enrolment to the study programme occurs in summer and in winter. Students of the summer intake have Master Thesis as a separate semester in their study plan to facilitate their mobility. Winter intake students can develop their Master Thesis more gradually.
Aim	The aim of the study programme is to prepare professionals with expertise in systems thinking and engineering sciences who are able to use, choose, develop, and acquire ICT solutions that enable enterprise development; who are able to design intra- and inter-organizational information systems and are capable of participating in corresponding interdisciplinary and international projects.
Tasks	Tasks of the study programme: - to develop students' systems thinking ability and their skills to use systems theory in constructing solutions which promote the development of businesses and science; - to integrate business in ICT topics at different levels of granularity (inside the courses and among the courses); - to apply the newest ICT developments in the study process, facilitate self-organized studies and technology-supported as well as traditional teamwork/group work; - to assure the learning outcomes defined for the programme; - to prepare students for their doctoral studies; - to assure the flexibility of the study programme and possibility to modify it in order to follow changes in the labour market and new developments in different ICT and business areas; - to develop cooperation with similar or topic-related programmes in other countries within ERASMUS and other agreements.

Learning outcomes	Graduates of the study programme: - can identify business goals which are supportable by ICT solutions; - can identify business problems which are solvable by ICT solutions; - can, using appropriate technologies, model and analyse business processes, enterprise and business architecture, and information flows, as well as to design internal and inter-institutional information systems; - are able to follow advances concerning computer systems, communication technologies, and software and methods of their usage and to suggest various solutions and their combinations for raising competitiveness of enterprises and enterprise networks; - are able, using appropriate technologies, to develop enterprise improvement strategies, to plan analysis and change management projects, and define requirements for new products and services; - are able to interpret business concepts in computer science and ICT terms and vice versa; - can motivate, educate, and train employees to use the most appropriate ICT solutions, as well as participate in and lead inter-disciplinary and international teams; - are able to participate in international scientific projects in the area of business informatics as well as to propose and lead scientific projects; - are able to follow the rules of ethics in business and information systems development, and systems analysis.
Final/state examination procedure, assessment	Final examination procedure includes development of Master Thesis (30 ECTS). The Master Thesis is author's original research, where methods, models, techniques and prototypes applicable for solving tasks in the field of business informatics are analytically or experimentally assessed and/or integrated and/or designed. The purpose of the Master Thesis is to give students an opportunity to apply their knowledge and skills in the field of scientific research in order have firm grounding for post graduate studies; to further develop their competence in decision making, problem identification, analysis, and solving, as well as to promote creativity and sharpen professional discussion and presentation skills. The learning outcomes in Master Thesis are evaluated according to 10 grade (10 – the highest) system.
Description of the future employment	Graduates of the study programme work for IT companies, public and private institutions using advanced ICT solutions, and consulting firms. They are qualified to fill the positions of Business Architect; Information Architect; Information Systems Architect; Information Engineer; Information Systems Engineer; Systems Analyst and Designer; Business Process Analyst, Engineer, and Manager; Business Analyst, Risk Manager, Requirements Engineer; Chief Information Officer; IS Manager; Business and IT Consultant, and the like.
Special enrollment requirements	
Opportunity to continue studies	Opportunity to continue doctoral studies in Latvia, for instance, in the following study programmes: - Riga Technical University "Computer Science and Information Technology"; - Riga Technical University "E-studies Technology and Management"; - Riga Technical University "Environmental Engineering"; - University of Latvia "Computer Science and Mathematics"; - Vidzeme University of Applied Sciences "Socio-technical Systems Modelling". Students can continue their education in doctoral study programmes in the area of informatics in other EU countries.

Courses

No	Code	Name	Credit points
A		**Compulsory Study Courses**	**57.0**
1	DE0745	Advanced data technologies	6.0
2	DE0747	Enterprise Architecture and Requirements Engineering	6.0
3	DE0752	Systems Theory	6.0
4	DE0740	Business Process Management and Engineering	6.0
5	DE0751	e-Business Solutions	6.0
6	DE0645	Portfolio Management Technologies	6.0
7	DE0739	Knowledge Management Systems	6.0
8	DE0754	Service Science, Management, and Engineering	6.0
9	DE0742	Quality, Risk and Security Technologies	6.0
10	DE0746	Research Methods in Business Informatics	3.0
B		**Compulsory Elective Study Courses**	**27.0**
B1		**Field-Specific Study Courses**	**21.0**
		Networking	*3.0*
1	DE0001	Storage Networking	3.0
2	DE0748	Network Security Requirements	3.0
		Specific Software Applications	*6.0*
1	DE0743	Artificial Intelligence in Business	6.0
2	DE0753	Information Systems Security Engineering	6.0
		Enterprise Information Systems	*6.0*
1	DE0738	Enterprise Information Technology Architecture, Applications and Integration	6.0
2	DE0638	Digital Transformation	6.0
		Analytics	*6.0*
1	DE0750	Business Analytics	6.0
2	DE0940	Business Analytics with Machine Learning	6.0
B2		**Humanities and Social Sciences Study Courses**	**6.0**
1	BS0055	Business Law	6.0
2	BS0054	Business Ethics	6.0
3	BS0052	Entrepreneurship	6.0
4	BS0053	Business Communication Skills	6.0
5	BS0050	Entrepreneurial Finance	6.0
6	BS0051	Leadership	6.0
7	BS0049	Corporate Governance	6.0
8	DE0741	Pedagogical Process. Basics	6.0
9	DE0643	Pedagogy	3.0
10	DE0729	Communication and Presentation Skills	3.0
C		**Free Elective Study Courses**	**6.0**
E		**Final Examination**	**30.0**
1	DE0744	Master Thesis	30.0